

### **ENVIRONMENTAL PROTECTION DIVISION**

### Richard E. Dunn, Director

**EPD Director's Office** 

2 Martin Luther King, Jr. Drive Suite 1456, East Tower Atlanta, Georgia 30334 404-656-4713

December 26, 2019

### **MEMORANDUM**

To:

Karen Hays, Air Branch Chief

Through:

Dika Kuoh, Assistant Branch Chief

From:

DeAnna Oser, Ambient Monitoring Program Manager

RE:

South DeKalb November 1 – 23, 2019 Sampling Results for Ethylene Oxide

Samples of Ethylene Oxide (EtO) were taken at our South DeKalb monitoring station in November 2019. Each of the samples were sent to Eastern Research Group (ERG) for analysis. The samples listed as X indicate that the sample was not collected properly. The Qualifier code of "2" was given two samples to indicate that the collection deviated from established procedures, but the integrity of the sample was not compromised.

Date	Qualifier	EtO Concentration (ug/m3)
11/1/2019		X
11/5/2019		X
11/8/2019		0.14
11/13/2019		0.13
11/15/2019		0.26
11/20/2019		0.75
11/23/2019	2	0.08

If you have any questions, please let me know.

DGO/do



Eastern Research Group 601 Keystone Park Drive Suite 700 Morrisville, NC 27560

December 10, 2019

Ms. Jaime Gore U.S. Environmental Protection Agency, Region 4 4244 International Pkwy, Suite 120 Atlanta, GA 30354 Project Name: GA EtO

Dear Ms. Jaime Gore,

This report contains the analytical results for the sample(s) received under chain(s) of custody by Eastern Research Group on 11/14/19 11:22 through 11/19/19 10:38.

The test results in this report are in compliance with NELAC accreditation requirements for the certified parameters. All analyses were performed as described in the US EPA-approved QAPP, under the contract for UATMP, NATTS, CSATAM, PAMS and NMOC support (US EPA Contract No. EP-D-14-030). This cover page is an integral part of this report, and any exceptions or comments are noted on the last page.

Release of the data contained in this data package and in the data submitted in the electronic data deliverable, has been authorized by the Program Manager, or the Program Manager's designee as verified by the following signature.

The issuance of the final Certificate of Analysis takes precedence over any previous Report. If you have any questions, please contact me at 919-468-7924.

Sincerely,

Julie Swift Program Manager julie.swift@erg.com

The information contained in this report and its attachment(s) are intended only for the use of the individual to whom it is addressed and may contain information that is privileged, confidential, or exempt from disclosure. If the reader of this message is not the intended recipient, you are hereby notified that any dissemination, distribution, or copying of this report is strictly prohibited. If you have received this report in error, please notify julie.swift@erg.com and delete the report without retaining any copies.



U.S. Environmental Protection Agency, Region 4

4244 International Pkwy, Suite 120

Atlanta, GA 30354

ATTN: Ms. Jaime Gore

PHONE: (404) 362-4912

FAX: (919) 541-0516

FILE #: 4022.00

REPORTED: 12/10/19 09:10

SUBMITTED: 11/14/19 to 11/19/19

AQS SITE CODE:

SITE CODE:

GA EtO

### ANALYTICAL REPORT FOR SAMPLES

SampleName	<u>LabNumber</u>	<u>Matrix</u>	<u>Sampled</u>	Received
South Dekalb	9111413-01	Air	11/08/19 23:59	11/14/19 11:22
South Dekalb	9111510-01	Air	11/13/19 23:59	11/15/19 10:52
South Dekalb	9111924-01	Air	11/15/19 23:59	11/19/19 10:38



U.S. Environmental Protection Agency, Region 4

4244 International Pkwy, Suite 120

Atlanta, GA 30354

Comments:

ATTN: Ms. Jaime Gore

PHONE: (404) 362-4912

**Description:** South Dekalb

FAX: (919) 541-0516

Pressure @ Receipt: 4.50" Hg

Lab ID:

9111413-01

Canister #: A21025

<u>Flag</u>

GA EtO

FILE #: 4022.00

AQS SITE CODE:

SITE CODE:

REPORTED: 12/10/19 09:10

SUBMITTED: 11/14/19 to 11/19/19

Sampled: 11/08/19 23:59

Received: 11/14/19 11:22 Analyzed: 11/20/19 12:57

Air Toxics by EPA Compendium Method TO-15

**Results** 

ppbv ug/m³

**MDL** <u>ppbv</u>

**Analyte** Ethylene oxide

0,0767

0.14

0.0250

Eastern Research Group

The results in this report apply only to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Page 3 of 8



U.S. Environmental Protection Agency, Region 4

4244 International Pkwy, Suite 120

Atlanta, GA 30354

ATTN: Ms. Jaime Gore

FAX: (919) 541-0516 PHONE: (404) 362-4912

FILE #: 4022.00

REPORTED: 12/10/19 09:10

SUBMITTED: 11/14/19 to 11/19/19

AQS SITE CODE:

SITE CODE:

GA EtO

Description: South Dekalb

9111510-01 Lab ID:

Sampled: 11/13/19 23:59

Pressure @ Receipt: 2.50" Hg

Canister #: SAT123

Received: 11/15/19 10:52 Analyzed: 11/20/19 22:37

**Comments:** 

Air Toxics by EPA Compendium Method TO-15

**Results** 

**MDL** 

<u>Analyte</u>

ppby ug/m<sup>3</sup>

ppby Flag

Ethylene oxide

0.0715 0.13 0.0250



U.S. Environmental Protection Agency, Region 4

4244 International Pkwy, Suite 120

Atlanta, GA 30354

ATTN: Ms. Jaime Gore

PHONE: (404) 362-4912

**Description:** South Dekalb

**FAX:** (919) 541-0516

Pressure @ Receipt: 4.00" Hg

Lab ID:

9111924-01

Canister #: 5133

AQS SITE CODE: SITE CODE:

FILE #: 4022.00

REPORTED: 12/10/19 09:10

SUBMITTED: 11/14/19 to 11/19/19

GA EtO

Sampled: 11/15/19 23:59

Received: 11/19/19 10:38

Analyzed: 11/26/19 18:43

Air Toxics by EPA Compendium Method TO-15 MDL

**Results** 

ppbv ug/m<sup>3</sup>

<u>Flag</u>

<u>vdqq</u> 0.0250

Ethylene oxide

<u>Analyte</u>

Comments:

0.144 0.26



U.S. Environmental Protection Agency, Region 4

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FILE#: 4022.00

REPORTED: 12/10/19 09:10

SUBMITTED: 11/14/19 to 11/19/19

AQS SITE CODE:

SITE CODE:

GA EtO

Analyte	Result	Units	Source Result	RPD	RPD Limit	Notes
Air Toxics by EPA Compendiu	m Method TO-15 - Q	uality Control				
Batch B9K2005 - Summa Canisto	er Prep			1 1 - 1 34 100 130		
Blank (B9K2005-BLK1)			Prepared: 11/12/19	Analyzed: 11/20/19		
Ethylene oxide	ND	ppbv				U
Batch B9K2605 - Summa Canist	er Prep					
Blank (B9K2605-BLK1)	•		Prepared: 11/18/19	Analyzed: 11/26/19		
						- 11



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REPORTED: 12/10/19 09:10

SUBMITTED: 11/14/19 to 11/19/19

AQS SITE CODE:

SITE CODE:

GA EtO

Analyte	Result	Units	% Difference	Limit (%)	Notes
Air Toxics by EPA Compendium Me	thod TO-15 - (	Quality Contro	I		
Sequence 1911047			ad O Amahama	4. 11/20/10	
Calibration Check (1911047-CCV1)		<u> </u>	Prepared & Analyze	1: 11/20/19	
Ethylene oxide	2.00	ppbv	-19.8	30.00	
Sequence 1911058					
Calibration Check (1911058-CCV1)	Prepared & Analyzed: 11/26/19				
Ethylene oxide	2.75	ppbv	9,9	30.00	



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AQS SITE CODE:

SITE CODE:

GA EtO

#### **Notes and Definitions**

U

**Under Detection Limit** 

Analyte NOT DETECTED ND

NR Not Reported

MDL. RPD

Method Detection Limit Relative Percent Difference

Note: The test results meet all requirements of NELAC; however the following analytes are not accredited: 1,2,4-trimethylbenzene, 1,2-dibromoethane, 1,2-dichloropropane, 1,3,5-trimethylbenzene, 1,3-butadiene, acetylene, acrolein, bromochloromethane, bromodichloromethane, bromoform, carbon disulfide, dibromochloromethane, dichlorodifluoromethane, dichlorotetrafluoroethane, ethyl acrylate, ethyl tert butyl ether, ethylene oxide, hexachloro-1,3-butadiene, n-octane, propylene, tert amyl methyl ether, tetrachloroethylene, trans-1,2-dichloroethylene, trichlorofluoromethane, and trichlorotrufluoroethane.



Eastern Research Group 601 Keystone Park Drive Suite 700 Morrisville, NC 27560

December 12, 2019

Ms. Jaime Gore U.S. Environmental Protection Agency, Region 4 4244 International Pkwy, Suite 120 Atlanta, GA 30354 Project Name: GA EtO

Dear Ms. Jaime Gore,

This report contains the analytical results for the sample(s) received under chain(s) of custody by Eastern Research Group on 12/04/19 11:37.

The test results in this report are in compliance with NELAC accreditation requirements for the certified parameters. All analyses were performed as described in the US EPA-approved QAPP, under the contract for UATMP, NATTS, CSATAM, PAMS and NMOC support (US EPA Contract No. EP-D-14-030). This cover page is an integral part of this report, and any exceptions or comments are noted on the last page.

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Sincerely,

Julie Swift Program Manager julie.swift@erg.com

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U.S. Environmental Protection Agency, Region 4

4244 International Pkwy, Suite 120

Atlanta, GA 30354

ATTN: Ms. Jaime Gore

PHONE: (404) 362-4912

FAX: (919) 541-0516

FILE #: 4022.00

REPORTED: 12/12/19 15:08

**SUBMITTED: 12/04/19** 

AQS SITE CODE:

SITE CODE:

GA EtO

#### ANALYTICAL REPORT FOR SAMPLES

SampleName	<u>LabNumber</u>	<u>Matrix</u>	Sampled	Received
South Dekalb	9120424-01	Air	11/20/19 23:59	12/04/19 11:37
South Dekalb	9120424-02	Air	11/23/19 23:59	12/04/19 11:37



U.S. Environmental Protection Agency, Region 4

4244 International Pkwy, Suite 120

Atlanta, GA 30354

ATTN: Ms. Jaime Gore

PHONE: (404) 362-4912

Description: South Dekalb

Comments:

Pressure @ Receipt: 4.50" Hg

Lab ID:

Canister #: 5026

9120424-01

GA EtO

FILE#: 4022.00

AQS SITE CODE:

SITE CODE:

**REPORTED: 12/12/19 15:08** 

SUBMITTED: 12/04/19

Sampled: 11/20/19 23:59

Received: 12/04/19 11:37

Analyzed: 12/05/19 19:59

Air Toxics by EPA Compendium Method TO-15

**Results** 

FAX: (919) 541-0516

MDL

ppbv ug/m³

<u>Flag</u>

ppbv

Ethylene oxide

<u>Analyte</u>

0.75 0.414

0.0250



U.S. Environmental Protection Agency, Region 4

4244 International Pkwy, Suite 120

Atlanta, GA 30354

**Analyte** 

ATTN: Ms. Jaime Gore

PHONE: (404) 362-4912

362-4912 **FAX**: (919) 541-0516

FILE #: 4022.00

REPORTED: 12/12/19 15:08

SUBMITTED: 12/04/19

AQS SITE CODE:

SITE CODE:

GA EtO

**Description:** South Dekalb **Pressure @ Receipt:** 0.0" Hg

Lab ID: 9120424-02

Sampled: 11/23/19 23:59

Canister #: 19277

Received: 12/04/19 11:37

Analyzed: 12/05/19 20:47

Comments: ambient at field recovery

Air Toxics by EPA Compendium Method TO-15

Results

80.0

<u>MDL</u>

ppbv ug/m³

Flag ppby

Ethylene oxide 0.0455

0.0250



U.S. Environmental Protection Agency, Region 4

4244 International Pkwy, Suite 120

Atlanta, GA 30354

Ethylene oxide

ATTN: Ms. Jaime Gore

PHONE: (404) 362-4912

12 **FAX**: (919) 541-0516

FILE #: 4022.00

REPORTED: 12/12/19 15:08

**SUBMITTED:** 12/04/19

AQS SITE CODE:

SITE CODE:

GA EtO

ı							i
				Source		RPD	
	Aughdia	Result	Units	Result	RPD	Limit	Notes
	Analyte	Nesuic	VIII.				

Air Toxics by EPA Compendium Method TO-15 - Quality Control

ND

Batch B9L0506 - Summa Canister Prep

Blank (B9L0506-BLK1)

ppbv

Prepared: 11/25/19 Analyzed: 12/05/19

11



U.S. Environmental Protection Agency, Region 4

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FAX: (919) 541-0516

FILE #: 4022.00

REPORTED: 12/12/19 15:08

**SUBMITTED:** 12/04/19

AQS SITE CODE:

SITE CODE:

GA EtO

% Difference Limit (%) Units Notes Result Analyte

ppbv

Air Toxics by EPA Compendium Method TO-15 - Quality Control

Sequence 1912015

Calibration Check (1912015-CCV1)

2.84

Ethylene oxide

13.4

Prepared & Analyzed: 12/05/19

Eastern Research Group

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Page 6 of 7



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FILE #: 4022.00

REPORTED: 12/12/19 15:08

**SUBMITTED:** 12/04/19

AQS SITE CODE:

SITE CODE:

GA EtO

#### **Notes and Definitions**

U Under Detection Limit
ND Analyte NOT DETECTED

NR Not Reported

MDL Method Detection Limit
RPD Relative Percent Difference

Note: The test results meet all requirements of NELAC; however the following analytes are not accredited: 1,2,4-trimethylbenzene, 1,2-dibromoethane, 1,2-dichloropropane, 1,3,5-trimethylbenzene, 1,3-butadiene, acetylene, acrolein, bromochloromethane, bromodichloromethane, bromoform, carbon disulfide, dibromochloromethane, dichlorodifluoromethane, dichlorotetrafluoroethane, ethyl tert butyl ether, ethylene oxide, hexachloro-1,3-butadiene, n-octane, propylene, tert amyl methyl ether, tetrachloroethylene, trans-1,2-dichloroethylene, trichlorofluoromethane, and trichlorotrufluoroethane.